

CLAIMS

1. A nuclear, biological, and chemical (NBC) filtration unit for use with a portable environmental control unit (ECU) comprising:
 - a first air flow path wherein air passes through said filtration unit and to said ECU without said air passing through an NBC filter;
 - a second air flow path wherein air passes through said filtration unit and to said ECU through an NBC filter; and
 - a controller allowing said filtration unit to switch from passing air through said first air flow path to said second airflow path and from said second air flow path to said first air flow path repeatedly without said NBC filter being removed from said filtration unit.
2. The filtration unit of claim 1 wherein said switching between said first air flow path and said second air flow path is performed without human intervention.
3. The filtration unit of claim 1 wherein said switching between said first airflow path and said second air flow path is commanded by a human operator at a remote location.
- 15 4. The filtration unit of claim 3 wherein said remote location is inside a shelter utilizing said ECU for environmental control.
5. The filtration unit of claim 4 wherein said command is sent via a wireless technology.
6. The filtration unit of claim 5 wherein said wireless technology is bluetooth.
7. The filtration unit of claim 1 further comprising a third air flow path wherein air passes through said filtration unit and to said ECU through another NBC filter and said controller can switch freely between said first, second, and third air flow paths.
- 20 8. The filtration unit of claim 7 wherein said second air flow path and said third air flow path are generally symmetrical.

9. The filtration unit of claim 7 wherein said NBC filter in said second air flow path need not be changed when it has reached the end of its useful life as said controller may switch to said NBC filter in said third air flow path.
10. The filtration unit of claim 7 wherein air flow may be switched from said second air flow path to said third air flow path without any unfiltered air being provided to said ECU.
- 5 11. The filtration unit of claim 7 wherein each of said second and said third air flow path includes a blower.
12. The filtration unit of claim 7 further comprising an inlet manifold and a blower wherein said inlet manifold allows said blower to direct said air down either said second or said third air flow path.
- 10 13. The filtration unit of claim 12 wherein said inlet manifold also allows said blower to direct said air down both said second and said third air flow path simultaneously.
14. The filtration unit of claim 1 wherein said NBC filter comprises a deep active carbon bed filter.
- 15 15. The filtration unit of claim 1 wherein said first air flow path includes a filter which is not an NBC filter.
16. The filtration unit of claim 1 wherein said ECU is a field deployable ECU (FDECU) or light ECU (LECU) as used by the United States military.
17. The filtration unit of claim 1 wherein air is at least partially pulled through said first air path by a blower in said ECU.
- 20 18. The filtration unit of claim 1 wherein air is at least partially pushed through said NBC filter by a blower in said second air path.

19. A method of providing filtered air and unfiltered air to an environmental control unit comprising:
- having a filtration unit having at least two air paths and a controller;
- flowing air through a first of said at least two air paths and through a nuclear, biological and
- 5 chemical (NBC) filter;
- allowing said controller to switch said air flow from said first of at least two air paths to a second of said at least two air paths;
- flowing air through said second of said at least two air paths and not through an NBC filter;
- allowing said controller to switch said air flow from said second of said at least two air paths
- 10 to said first of said at least two air paths; and
- leaving said NBC filer in said first air path in both said steps of flowing.
20. A filtration unit comprising:
- means to force air through a first air flow path;
- means to force air through a second air flow path; and
- 15 means to select which air flow path air is flowing through;
- wherein said first air flow path does not provide NBC filtered air; and
- wherein said second air flow path provides NBC filtered air.